



Aviation Safety Program

Weather Accident Prevention Annual Project Review

Cleveland, Ohio

June 5-7, 2001



Review Objectives

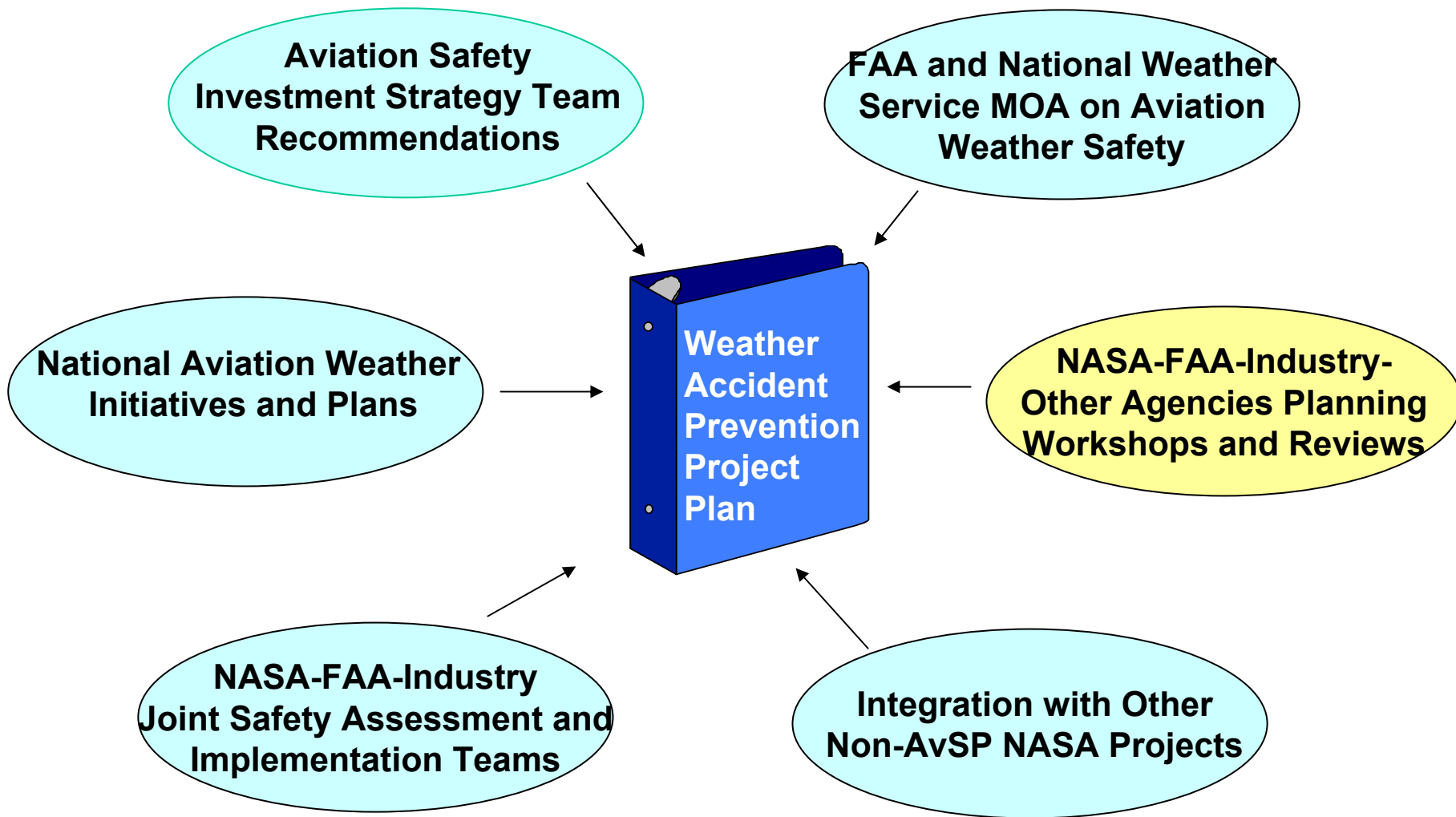
- Communicate progress to NASA Stakeholders, Partners, and Customers
- Solicit feedback on NASA's Weather Safety Plans and activities from the aviation community.
 - Q&A session after presentations
 - Discussion sessions following each topical session
 - Panel Discussion during last morning session (June 7)
 - Survey of NASA WxAP plans/products
- Catalyst for future partnerships and collaboration with aviation community
- Enhanced integration of NASA Weather Accident Prevention Project Elements
- Preparation for NASA FY02 detailed planning activities



Review Objectives

Aviation Safety Program

Weather Accident Prevention





Attendees of Review

Aviation Safety Program

Weather Accident Prevention

NASA AvSP Management/Researchers

NASA Base Management/Researchers

FAA

NWS

NTSB

Avionics Industry

Airlines

Aircraft Manufacturers

Pilot Associations

Aircraft Associations

Academia

DoD



Survey

- Evaluate NASA's weaknesses/strengths
- Evaluate NASA products being developed
 - Technical Issues
 - Coordination Issues
 - Implementation Issues
 - Others
- Identity disclosure is voluntary
- Use postage-paid envelope
- Summary of surveys will be forwarded to all attendees



Meeting Logistics

- Message Board available at registration table
 - Telephone Messages: 216-447-1300
 - FAX: 216-642-9334
- Coffee and snacks available during breaks
- Lunch available in the pool area Tuesday and Wednesday (\$10 each) – Sign-up sheet at registration table
- List of local restaurants is available at registration table
- Presentations are on CD-ROM
- Break-out room available for side meetings – Sign-up sheet at registration table



Day 1 Morning Agenda

Aviation Safety Program

Weather Accident Prevention

8:00 a.m.	Welcome	Sehra, GRC Rohn, GRC
8:15 a.m.	Meeting Objectives and Logistics	Nadell, GRC
8:30 a.m.	Weather Accident Prevention (WxAP) Project Overview and Status	Nadell, GRC
9:00 a.m.	Development of WxAP System Architecture and Concept of Operation	Grantier, GRC
9:30 a.m.	Aviation Weather Information Overview and Status	Stough, LaRC
10:15 a.m.	Break	
10:30 a.m.	Weather Information Communications Overview and Status	Martzaklis, GRC
11:15 a.m.	Turbulence Detection and Mitigation Overview and Status	Bogue, DFRC Watson, LaRC
12-1 p.m.	Lunch	



Day 1 Afternoon Agenda

Aviation Safety Program

Weather Accident Prevention

Cockpit Weather Information Systems

1:00 p.m.	Weather Information Network	Leger, Honeywell
1:15 p.m.	NASA Langley WINN System Operational Assessment	Jonsson, LaRC
1:30 p.m.	United's SKY-PAD™ Project	Burns, UAL
1:45 p.m.	Enhanced Weather Radar and Aviation Weather Awareness & Reporting Programs	Kronfeld, Rockwell
2:15 p.m.	Satellite Weather Information Service	Kerczewski, GRC
2:35 p.m.	Pilot Weather Advisor™	Hoffler, Vigyan, Inc.
2:55 p.m.	The Results of the Evaluation of Using Lightning Data to Improve Oceanic Convective Forecasting for Aviation	Nierow, FAA
3:00 p.m.	Oceanic Weather Information: Oceanic Convective Convective Nowcasting Demonstration (OCND)	Lindholm, NCAR



Day 1 Afternoon Agenda (cont.)

Aviation Safety Program

Weather Accident Prevention

Cockpit Weather Information Systems (cont.)

3:15 p.m.	Break	
3:30 p.m.	VHF Datalink (Mode 2) for Cockpit Weather for Air Transports	Tanger, LMGT
3:40 p.m.	Preliminary VLD Mode 2 Bench and Flight Test Results	Skidmore, OU
4:00 p.m.	Decision-making In Flight With Different Convective Weather Information Sources: Preliminary Results	Latorella, LaRC Chamberlain, LaRC
4:30 p.m.	GA Cockpit Weather Information System Simulation Studies	McAdaragh, FAA Novacek, RTI
5:00 p.m.	Discussion: Cockpit Weather Systems	
5:30 p.m.	Conclude for the Day	



Day 2 Morning Agenda

Aviation Safety Program

Weather Accident Prevention

Cockpit Weather Information Systems (cont.)

8:00 a.m.	General Aviation FIS Broadcast System	Joyce, Honeywell
8:20 a.m.	FIS Architecture Study Plan	Tanger, LMG Nichols, Johns Hopkins APL

Airborne Weather Reporting System

8:45 a.m.	TAMDAR Development Strategy	Schmidt, FAA
8:55 a.m.	TAMDAR Capabilities Development	Daniels, LaRC
9:25 a.m.	TAMDAR Datalink Development	Andro, GRC
9:45 a.m.	Overview of the Business Feasibility of the TAMDAR System	Kauffmann, ODU
10:15 a.m.	Break	
10:30 a.m.	Impact of MDCRS/TAMDAR data on National Weather Service (NWS) Operations	Weiss, NWS



Day 2 Morning Agenda (cont.)

Aviation Safety Program

Weather Accident Prevention

10:50 a.m. Discussion: Airborne Weather Reporting System

Airborne Turbulence Warning System

11:25 a.m. Airborne Turbulence Warning System Development Bogue, DFRC

11:40 a.m. Meteorological Case Studies of Turbulence Encounters Ferris, MIT
Lincoln Labs.

12-1 p.m. Lunch

1:00 p.m. Weather Associated With the Fall 2000 Turbulence Flight Tests Hamilton, LaRC

1:20 p.m. Numerical Simulation of Event 191-6 of NASA's Flight Tests Proctor, LaRC

1:40 p.m. Unbalanced Supergradient Flow – It's Role In Organizing Severe Turbulence In Both Convective and Clear Air Case Studies Kaplan, NCSU

2:00 p.m. Simulations of Continuous and Discrete Turbulence Events Sharman, NCAR



Day 2 Afternoon Agenda (cont.)

Aviation Safety Program

Weather Accident Prevention

Airborne Turbulence Warning System (cont.)

2:20 p.m.	Development and Flight Test of In Situ Turbulence Algorithms	Robinson, AeroTech
2:45 p.m.	Turbulence LIDAR Development Status	Clark, LaRC
3:00 p.m.	Break	
3:15 p.m.	Flight Test Results for a Turbulence Detection Radar	Schaffner, LaRC
4:00 p.m.	Market Assessment of Forward-Looking Turbulence Sensing Systems	Kauffmann, ODU
4:30 p.m.	Turbulence Secure Cabin Exercise	Bogue, DFRC
5:00 p.m.	Discussion: Airborne Turbulence Warning System	
5:30 p.m.	Conclude for the Day	



Day 3 Morning Agenda

Aviation Safety Program

Weather Accident Prevention

Airborne Turbulence Warning System (cont.)

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| 8:00 a.m. | Feasibility Study of Transport-Aircraft Control Systems for Turbulence Effects Mitigation | Borland, Boeing CAG |
| 8:20 a.m. | Turbulence JSAT/JSIT Status | Bogue, DFRC |

Implementation, Operation, and Technology Development

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|------------|---|-------------------|
| 8:40 a.m. | NASA-FAA-NOAA Partnering Strategy | Colantonio, GRC |
| 9:00 a.m. | Flight Information Services Data Link (FISDL) | Moosakhanian, FAA |
| 9:20 a.m. | Airline Implementation of Cockpit Weather Systems | Sambrano, UAL |
| 9:40 a.m. | Break | |
| 10:00 a.m. | Panel Session: Cockpit Weather Information Systems: Current and Future Challenges for Implementation, Operation, and Technology Development | |
| 11:45 a.m. | Annual Review Wrap-up | |
| 12:00 noon | Annual Review Concluded | |